## **ABSTRACT OF THE DISCLOSURE**

The method of noise attenuation comprises the steps of generating a noise canceling signal based on an environmental assumption, assessing the environmental assumption of the control unit, and altering the noise canceling signal based on the assessment. Assessing may comprise the step of comparing the environmental assumption with actual environmental data, including the step of generating a test sound wave to obtain actual environmental data. The test sound wave is then compared to a model of the sound wave based on the environmental assumption. This method is embodied in a system that includes an air induction body, a speaker in proximity to the air induction body, a microphone in communication with the speaker, a reference sensor, and a control unit with a noise cancellation feature with an environmental assumption. The control unit is in communication with the speaker, reference sensor, and the microphone and assesses the environmental assumption in light of actual environmental data.